
SUMMARY

The proposed Edgeley/Kulm Project is a 21-megawatt (MW) wind generation project proposed by Florida Power and Light (FPL) Energy North Dakota Wind LLC (Dakota Wind) and Basin Electric Power Cooperative (Basin). The proposed windfarm would be located in La Moure County, south central North Dakota, near the rural farming communities of Kulm and Edgeley. The proposed windfarm is scheduled to be operational by the end of 2003. Dakota Wind and other project proponents are seeking to develop the proposed Edgeley/Kulm Project to provide utilities and, ultimately, electric energy consumers with electricity from a renewable energy source at the lowest possible cost.

A new 115-kilovolt (kV) transmission line would be built to transmit power generated by the proposed windfarm to an existing U.S. Department of Energy, Western Area Power Administration (Western) substation located near Edgeley. The proposed interconnection would require modifying Western's Edgeley Substation.

Modifying the Edgeley Substation is a Federal proposed action that requires Western to review the substation modification and the proposed windfarm project for compliance with Section 102(2) of the National Environmental Policy Act (NEPA) of 1969, 42 U.S.C. 4332, and Department of Energy NEPA Implementing Procedures (10 CFR Part 1021). Western is the lead Federal agency for preparation of this Environmental Assessment (EA). The U.S. Fish and Wildlife Service (USFWS) is a

cooperating agency with Western in preparing the EA.

This document follows regulation issued by the Council on Environmental Quality (CEQ) for implementing procedural provisions of NEPA (40 CFR 1500-1508), and is intended to disclose potential impacts on the quality of the human environment resulting from the proposed project. If potential impacts are determined to be significant, preparation of an Environmental Impact Statement would be required. If impacts are determined to be insignificant, Western would complete a Finding of No Significant Impact (FONSI).

Environmental protection measures that would be included in the design of the proposed project to mitigate potential impacts include:

- FPL Energy's *General Bidding Instructions* to prospective windfarm construction contractors;
- *Best Management Practices* (BMPs) developed by FPL Energy for similar projects;
- Western's *Construction Standard 13, Environmental Quality Protection* document, which provides general guidance for environmental protection during both the construction and operation of the proposed windfarm;
- North Dakota Department of Health permit requirements for storm water runoff control;

- Air quality and erosion mitigation per North Dakota Department of Health requirements; and,
- *Suggested Practices for Raptor Protection on Power Lines* developed by the Edison Electric Institute (EEI).
- In addition, Dakota Wind and its partners have agreed to cooperatively participate with the USFWS and U.S. Geological Survey (USGS) in a *Migratory Bird Baseline Investigation and Monitoring Program* that would be implemented at the time of start-up of the proposed windfarm. Because of the proposed project's location near high populations of nesting and migratory species, these investigation and monitoring efforts would provide baseline data to the wind energy industry, USFWS, and USGS for future planning and regulation of wind energy projects.

Potential impacts analyzed in this EA include those related to the following resources:

- Physical resources including geology and soil, air, and water (surface and groundwater);
- Biological resources including vegetation, wetlands, wildlife, and threatened, endangered, proposed, and sensitive species;
- Social resources including socioeconomics, environmental justice, land use, visual, noise, recreation, cultural, and Native American religious concerns; and,
- Cumulative effects in consideration of past, present, and reasonably

foreseeable future activities in the area.

A Draft EA was distributed for comment to cooperating agencies, interested agencies, and interested members of the public during March 2003. Comments received are summarized in Chapter 4, and have been addressed in this EA.

In summary, potential impacts to each resource were evaluated to assess the potential for significant impacts from construction and operation of the proposed project. No significant impacts were found based on the mitigation and commitments contained in this EA. The evaluation considered the implementation of mitigation prescribed by FPL Energy's BMPs and construction contractor requirements, Western's Construction Standard 13, North Dakota Department of Health permit requirements, and adopted guidelines. Of specific importance to eliminating or minimizing impacts to the environment as a result of the proposed project is Dakota Wind's and Basin's siting of project components to avoid such features as residences, wetlands, and cultural sites that occur in the project area.

Finally, an adjacent wind energy development project proposed by Otter Tail Power Company comprises a "reasonably foreseeable future action" in the project area. In the EA, Western evaluated Otter Tail's proposed project as having a cumulative effect on resources in the project area. Consistent with the proposed Edgeley/Kulm Project, the proposed Otter Tail Project is not expected to result in any additional or cumulative impacts to those resources evaluated, if mitigation similar to the proposed Edgeley/Kulm Project is implemented.